# JOURNAL OF MENTAL HEALTH AND SOCIAL REHABILITATION JOURNAL OF MENTAL HEALTH AND SOCIAL REHABILITATION



Journal Homepage: <u>https://journal.poltekip.ac.id/jmhsr</u> E-ISSN: 3026-6181 <u>Research Article</u>

Volume 1	Issue 1	September 2023	DOI:	Page: 49-60

## Measuring Service Quality of Public Hospitals

Yadu K. Damodaran<sup>1</sup>, Kannan a/I Mani<sup>2</sup>, Ali Muhammad<sup>3</sup>, Muhammad Saad Saleem<sup>4</sup>

<sup>1</sup>Master's Student of Social Work, School of Sociology and Social Work, Christ Deemed to be University, Bengaluru, Karnataka, India

<sup>2</sup>Insp Kordinasi/Operasi E3C, Cawangan Khas Ibu Pejabat Polis Kontinjen Kedah, Malaysia
 <sup>3</sup>Departement of Community Guidance, Politeknik Ilmu Pemasyarakatan, West Java Indonesia
 <sup>4</sup>Chief Marketing Officer Trash Bee Pvt. Ltd. Institute of Space Technology, Islamabad, Pakistan Corresponding Author: Ali Muhammad; Email:alimuhammad32@poltekip.ac.id

#### ARTICLE INFO ABSTRACT Keywords: Patient's Satisfaction, Public In public hospitals the services quality has become an imperative in providing Hospital, Service Quality satisfaction because delivering services quality directly affected the patients' perception. The public sector should ensure patients receive the best services in Received : 8 July 2023 hospitals. Though there has been an attempt to improve the situation it seems not : 23 August 2023 Revised much has been achieved in raising the quality of service in public sector and this is : 15 September 2023 Accepted compounded by limited information on the factors that ail the delivery of service quality in the public hospital. Therefore, this research was conducted to know perception of patients about the services quality of public hospital in Lahore Pakistan. The study used a descriptive survey approach in collecting data from the respondents. The number of the respondents was 100 and the respondent was patients. Through convenient sampling the data is collected. A questionnaire was used to collect the data from primary sources. Quantitative technique was used to analyzed the data. For this purpose, 'SERVQUAL' instrument was used to measure the service quality delivered by the hospital. Findings show that all the factors discussed in the thesis affect the patients' perception but the result of infrastructure is the highest which means that infrastructure of the hospitals are positively associated with the perception of patients, but management of hospitals need to work on trustworthiness because of negative perception of patients.

### INTRODUCTION

Quality has become an important icon for the customer services provider and manufacturer in this era. With the passage of time services sector is rising quickly around the world (Irfan & Ijaz, 2011; Khalil, Asad, & Khan, 2018). All the services sector are trying to provide the best services to their customers make happy (Asad, Haider, & Fatima, 2018; Asad, Asif, Bakar, & Sheikh, 2021; Fatima & Asad, 2018). Providing best services to customers is in the result of to make customer loyal cut or reduction in cost, increase profitability, strong financial performance and take competitive edge (Amir & Asad, 2018; Asad, 2018; Asad, 2020; Asad, Shabbir,

Salman, Haider, & Ahmad, 2018; Haider, Asad, & Aziz, 2015).

Quality has become important for customers while selecting a service or product and at the same time organizations are making efforts to provide quality products or services as per customers' needs and wants (Alghamdi, 2014; Alateyah, Crowder, & Wills, 2014; Haider, Asad, & Fatima, 2017). Quality has been considered as a strategic advantage for the organizations to gain success and to sustain in the business world (Zerei, Kohan, & Puragha, 2015; Zuhaib , Wenyuan, Sulaiman, Siddiqu, & Qalati, 2022). Services sector play a vital role in maintaining and developing the human capital and achieve national objective (Allam Z., Asad, Ali, & Ali, 2021; Asad, Muhammad, Rasheed, Chethiyar, & Ali, 2020). Services industry has become a highly competitive and fast growing industry (Asad, Ahmad, Haider, & Salman, 2018). Now customers are considered the high key performance evaluator in every industry and play a vital role to measuring the quality of any product and services (Kanwal, N, & Janjua, 2014; Asad, Asif, Allam, & Sheikh, 2021; Kashif, et al., 2020).

In many countries the manufacturing sector in both local and international market are gaining outstanding success by implementing the principle of management quality around the world (Asad , Haider , Akhtar , & Javaid , 2011; Asad, Altaf, Israr, & Khan, 2020; Asad, Asif, Allam, & Sheikh, 2021; Asif, Asad, Bhutta, & Khan, 2021). The quality of product can easily be measured because of its tangible nature whereas the services are intangible so it's difficult to measure the quality and its quality highly depend on the customer expectation and perception (Irfan & Ijaz, 2011; Amir & Asad, 2018; Asif, Asad, Kashif, & Haq, 2021).

To assess the patient's satisfaction with valid and reliable tool regularly is necessary to increase the services quality by implementing the regulation according to the expectation of patients. (Ozlu & Uzun, 2015; Alkhuzaie & Asad, 2018).

In economy world the services sector has become more important. Services sector represent 73, 2% internal product in European Union according to European commission (2012). A long time the relationship has been built between services quality and customer satisfaction. Services quality is a strong tool to gain competitive advantage in this era (Martins, Carvalho, & Ramos, 2015; Ozlu & Uzun, 2015).

#### Literature Review

#### **Quality Service**

Quality has become an important icon for the customer services provider and manufacturer in this era with the passage of time services sector is rising quickly around the world (Kanwal, N, & Janjua, 2014; Asad, Altaf, Israr, & Khan, 2020; Asad, Sharif, & Alekam, 2016). All the services sector are trying to provide the best services to their customers

make happy (Asad, Asif, Bakar, & Sheikh, 2021; Allam Z., Asad, Ali, & Malik, 2022). Providing best services to customers is in the result of to make customer loyal cut or reduction in cost, increase profitability, strong financial performance and take competitive edge (Amir & Asad, 2018; Asad & Sharif, 2016; Asad, Asif, Khan, Allam, & Satar, 2022).

Quality has become important for customers while selecting a service or product and at the same time organizations are making efforts to provide quality products or services as per customers' needs and wants (Asad, 2020; Asad & Abid, 2018; Asad, Haider, & Fatima, 2018; Almansour, Asad, & Shahzad, 2016). Quality has been considered as a strategic advantage for the organizations to gain success and to sustain in the business world (Sabir, et al., 2014; Asad, Chethiyar, & Ali, 2020).

Services sector play a vital role in maintaining and developing the human capital and achieve national objective (Asad , Haider , Akhtar , & Javaid , 2011; Zerei, Kohan, & Puragha, 2015; Alghamdi, 2014). Services industry has become a highly competitive and fast growing industry. Now customers are considered the high key performance evaluator in every industry and play a vital role to measuring the quality of any product and services (Sattar, Alarifi, & Asad, 2021; Asad, et al., 2021; Hammami , Ahmed , Johny, & Sulaiman, 2021; Asad & Qadeer, 2014).

In many countries the manufacturing sector in both local and international market are gaining outstanding success by implementing the principle of management quality around the world (Asad . Haider, Akhtar, & Javaid, 2011; Asad, Chethiyar, & Ali, 2020). The quality of product can easily be measured because of its tangible nature whereas the services are intangible so it's difficult to measure the quality and its quality highly depend on the customer expectation and perception. (Irfan & Ijaz, 2011; Alkhuzaie & Asad, 2018; Asif, Asad, Kashif, & Haq, 2021). To assess the patient's satisfaction with valid and reliable tool regularly is necessary to increase the services quality by implementing the regulation according to the expectation of patients. (Ozlu & Uzun, 2015; Asad, 2020; Asad, 2011).

In economy world the services sector has become more important. Services sector represent 73, 2% internal product in European Union according to European commission (2012). Before long time the relationship has been built between services quality and customer satisfaction (Alghamdi, 2014; Asad, 2020; Amir & Asad, 2018; Asad, Asif, Bakar, & Altaf, 2021). Services quality is a strong tool to gain competitive advantage in this era (Martins, Carvalho, & Ramos, 2015; Amir & Asad, 2018).

#### METHODS

The study was conducted to view the satisfaction of patients with services quality of public hospital.

- a. Descriptive research was carried out in order to view the satisfaction of patients.
- b. Survey research was conducted in which questionnaires were asked.
- c. The study is based on primary data collected.
- d. Quantitative Methods were used to collect and interpret data.
- e. Deductive approach is used in this study.

The study was conducted within Lahore because of limited time and resources. The population of this study was public hospitals of Lahore. The target population was patients of public hospital. Non probability convenience sampling technique is used for this research. Questionnaire was used as a research instrument based on five Likert scale in which responses were quantified as a 5 for strongly agree; 4 for agree; 3 for neutral; 2 for disagree; and 1 for strongly disagree to check the patient's satisfaction (Asad, Asif, Allam, & Sheikh, 2021; Asad, Sharif, & ALekam, 2016; Asad, Sharif, & Hafeez, 2016; Haider S. H., Asad, Fatima, & Atiq, 2017).

Taking mean score 3.0 as the cut point, mean scores above 3.0 were taken as representing the satisfaction of patients whereas mean scores 3.0 and below were taken as dissatisfaction of patients. Survey research was conducted to collect the data from patients. Descriptive analysis was used to analyze the data. The dependent variable for this study which also state as an outcome variable is patient's satisfaction with quality of services received at public hospitals.

It measured the satisfaction of patients with equipment neat and clean bed rooms washrooms visually cleanliness and employee's dress up properly. It measured the satisfaction of patients through polite behavior at the time of admission, error free services, and pleasantly discharge procedure

#### **RESULTS AND DISCUSSION**

Gender Wise distribution of Respondents **Table 1**. *Gender distribution* 

GENDER	FREQUENCY	PERCENT %
MALE	30	30.0
FEMALE	70	70.0
Total	100	100.0

Table showed that in this study 100 respondents participated out of which male respondents were 30 and female 70 so majority of the respondents were female. Qualification Wise distribution of Respondents.

 Table 2. Qualification Respondents

QUALIFICATION	FREQUENCY	PERCENT %
Metric	27	27.0
Intermediate	13	13.0
Graduate	3	3.0
Masters	15	15.0
Others	42	42.0
Total	100	100.0

Table showed that in the study 27 (27.0%) respondents from metric 13 (13.0%) from intermediate, 3 (3.0%) from graduation 15(15.0) from master and 42(42.0) from others qualification. So the majority of respondent were from other qualification Program.

**Table 3.** Age Wise distribution of Respondents

AGE	FREQUENCY	PERCENT %
20-25	26	26.0
26-30	3	3.0
31-35	10	10.0
36-40	12	12.0
41-45	13	13.0
46-50	11	11.0
51-above	25	25.0
Total	100	100.0

Table showed that 26(26%) respondents were relating to age between "20-25" and 3 (3%) respondent was relating to age between "26-30", 10 (10%) respondents were relating to age between "31-35" whereas 12 (12%) relating to age group"36-40" and 13 (13%) respondent was relating to age between "41-45", and 11(11%) respondent was relating to age between "45-50", and 25 (25%) respondent was relating to age between "51-

#### Journal of Mental Health and Social Rehabilitation

Above". So majority of respondents were relating to **Table 7.** Employees are dressed properly age between "51-Above".

1		0 1 1
LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	8	8.0
Disagree	8	8.0
Partially Agree	11	11.0
Agree	38	38.0
Strongly Agree	35	35.0
Total	100	100.0

**Table 4.** Hospital has modern looking equipment.

Table showed 8(8%) respondents were strongly disagreeing with the above mentioned statement, 8 (8%) were disagree, 11 (11%) were partially agree, 38 (38%) were agree, 35 (35%) are strongly agree with the statement so majority of respondents were agreeing with this statement.

Table 5. Hospital has neat and clean rooms beds and washrooms.

LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	7	7.0
Disagree	8	8.0
Partially Agree	13	13.0
Agree	33	33.0
Strongly Agree	39	39.0
Total	100	100.0

Table showed 7 (7%) respondents were strongly disagreeing with the above mentioned statement, 8 (8%) were disagree, 13 (13%) were partially agree, 33 (33%) were agree, 39 (39%) were strongly agree with the statement so majority of respondents were strongly agreeing with this statement.

**Table 6**. Hospital cleanliness is visually appealing

=		
LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	3	3.0
Disagree	10	10.0
Partially Agree	27	27.0
Agree	40	40.0
Strongly Agree	20	20.0
Total	100	100.0

Table showed 3(3%) respondents were strongly disagreeing with the above mentioned statement, 10 (10%) were disagree, 27 (27%) were partially agree, 40 (40%) were agree, 20 (20%) were strongly agree with the statement so majority of respondents were agreeing with this statement.

LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	8	8.0
Disagree	9	9.0
Partially Agree	34	34.0
Agree	34	34.0
Strongly Agree	25	25.0
Total	100	100.0

Table showed 8(8%) respondents were strongly disagreeing with the above mentioned statement, 9 (9%) were disagree, 34 (34%) were partially agree, 24 (24%) were agree, 24 (24%) were strongly agree with the statement so majority of respondents were partially agreeing with this statement.

 
 Table 8. Patients are treated politely during
 admission procedure

LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	8	8.0
Disagree	9	9.0
Partially Agree	28	28.0
Agree	37	37.0
Strongly Agree	18	18.0
Total	100	100.0

Table showed 8 (8%) respondents were strongly disagreeing with the above mentioned statement, 9(9%) were disagree, 28 (28%) were partially agree, 37(37%) were agree, 18(18%) were strongly agree with the statement so majority of respondents were agreeing with this statement.

Table 9. I have never found any complain about this hospital

LEVEL OF AGREEMENT	N	PERCENT %
Strongly Disagree	6	6.0
Disagree	7	7.0
Partially Agree	28	28.0
Agree	38	38.0
Strongly Agree	28	21.0
Total	100	100.0

Table showed 6 (6%) respondents were strongly disagreeing with the above mentioned statement, 7 (7%) were disagree, 28 (28%) were partially agree, 38 (38%) were agree, 21 (21%) were strongly agree with the statement so majority of respondents were agreeing with this statement.

LEVEL OF AGREEMENT	N	PERCENT %
Strongly Disagree	4	4.0
Disagree	43	43.0
Partially Agree	24	24.0
Agree	10	10.0
Strongly Agree	19	19.0
Total	100	100.0

**Table 10.** I am satisfied with the overallperformance of hospital

Table showed 4 (4%) respondents were strongly disagreeing with the above mentioned statement, 43 (43%) were disagree, 24 (24%) were partially agree, 10 (10%) were agree, 19(19%) were strongly agree with the statement so majority of respondents were disagreeing with this statement.

Showed 6 (6%) respondents were strongly disagreeing with the above mentioned statement, 7 (7%) were disagree, 28 (28%) were partially agree, 38 (38%) were agree, 21 (21%) were strongly agree with the statement so majority of respondents were agreeing with this statement.

**Table 11.** I am satisfied with the employeecooperation

LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	8	8.0
Disagree	6	6.0
Partially Agree	39	39.0
Agree	20	20.0
Strongly Agree	27	27.0
Total	100	100.0

Table showed 8(8%) respondents were strongly disagreeing with the above mentioned statement, 6 (6%) were disagree, 39 (39%) were partially agree, 20 (20%) were agree, 27 (27%) were strongly agree with the statement so majority of respondents were partially agreeing with this statement.

Table 12. Attendants are treated well in hospital

LEVEL OF AGREEMENT	Ν	PERCENT %
Strongly Disagree	9	9.0
Disagree	4	4.0
Partially Agree	28	28.0
Agree	41	41.0
Strongly Agree	18	18.0
Total	100	100.0

Table showed 9 (9%) respondents were strongly disagreeing with the above mentioned statement, 4 (4%) were disagree, 28 (28%) were partially agree, 41 (41%) were agree, 18 (18%) were strongly agree with the statement so majority of respondents were agreeing with this statement.

**Table 13.** Mean and standard deviation of all variables

VARIABLES	MEAN	STANDER DEVIATION
Physical infrastructure	3.7250	.94582
Administration procedure	3.4933	.99096
Satisfaction	3.5900	.92763

The (*Picture 1*) showed the mean score indicate the current status of services quality of public hospital and it seems to be acceptable for the patients. Among the services quality's dimension, trustworthiness the lowest score was (mean=3.3667) than other dimensions and physical infrastructure achieves high score (mean=3.7250) but it was still less than 5 (strongly agree).

#### **CONCLUSION**

The primary purpose of the present study was to study measuring the services quality of public hospital in Lahore. In this study considered four major factors which represented most of the service quality factor practices in the hospital. The study reveals that all service quality dimensions exercised in the two hospital of Pakistan. The present study population of patient of hospital of Pakistan. The sample size of the study was 384 patients of hospitals of Pakistan.

The literature review has presented the theoretical evidence from past studies with regard to the link between service quality and patient satisfaction Questionnaire was used for data collection. Questionnaire was reliable because it was used in previous study in the present study descriptive analysis used to describe the data by using descriptive. In government Hospitals Mostly Doctors hardly pay attention to patients who mostly belong to the poor section of society. Because there is no one to check their negligence and indifferent attitude towards their patients

#### REFERENCES

- Alateyah, S. A., Crowder, R. M., & Wills, G. B. (2014). Identifying factors affecting the intention of Saudi Arabian citizens to adopt egovernment services. *International Journal of Innovation, Management and Technology*, 5(4), 1-7. doi:10.7763/IJIMT.2014.V5.527
- Alghamdi, F. (2014). Service quality pereption on patient satisfcation in government hospital in Saudi Arbia. US National library of medicine national institute of health, 35(10).
- Alkhuzaie, A. S., & Asad, M. (2018). Operating cashflow, corporate governance, and sustainable dividend payout. *International Journal of Entrepreneurship*, 22(4), 1-9.
- Allam, Z., Asad, M., Ali, A., & Ali, N. (2021).
  Visualization of knowledge aspects on workplace spirituality through bibliometric analysis. 2021 International Conference on Decision Aid Sciences and Application (DASA) (pp. 446-450). Sakheer: IEEE. doi:10.1109/DASA53625.2021.9682372
- Allam, Z., Asad, M., Ali, N., & Malik, A. (2022). Bibliometric analysis of research visualizations of knowledge aspects on burnout among teachers from 2012 to January 2022. 022 International Conference on Decision Aid Sciences and Applications (DASA) (pp. 126-131). Chiangrai, Thailand: IEEE. doi:10.1109/DASA54658.2022.9765200
- Almansour, A. Z., Asad, M., & Shahzad, I. (2016). Analysis of corporate governance compliance and its impact over return on assets of listed companies in Malaysia. *Science International*, 28(3), 2935-2938.
- Amir, A., & Asad, M. (2018). Consumer's Purchase Intentions towards automobiles in Pakistan. Open Journal of Business and Management, 6, 202-213. doi:10.4236/ojbm.2018.61014
- Asad, M., Haider, S. H., Akhtar, M. B., & Javaid, M. U. (2011). Human Resource Practices and Enterprise Performance in Small and Medium Enterprises of Pakistan. *In First International Conference on Contemporary Issues of Business*, 1-18.
- Asad, M. (2010). Perception of Trader towards international trade: A diagnostic study. *Paradigms A Journal of Commerce, Economics, and Social Sciences, 4*(1), 48-63. doi:10.24312/paradigms040103

- Asad, M. (2011). Working capital management and corporate performance of textile sector in Pakistan. *Paradigms: A Research Journal of Commerce, Economics and Social Sciences,* 6(1), 100-114. doi:10.24312/paradigms060101
- Asad, M. (2018). Practices of Corporate Social Responsibility and Labor Laws in SMEs of Sialkot. 8th Judicial Conference (pp. 1-9). Islamabad: Supreme Court of Pakistan.
- Asad, M. (2020). Human resource practices and employee turnover intentions: Do organizational commitment mediates and social support moderates the relationship? *International Journal of Psychosocial Rehabilitation, 24*(7), 5685-5695.
- Asad, M., & Abid, U. (2018). CSR practices and customer's loyalty in restaurant industry: Moderating role of gender. *NUML International Journal of Business & Management, 13*(2), 144-155.
- Asad, M., & Farooq, A. (2009). Factors influencing KSE 100 index / share prices. Pardigms A Journal of Commerce, Economics, and Social Sciences, 3(1), 34-51. doi:10.24312/paradigms030102
- Asad, M., & Kashif, M. (2021). Unveiling success factors for small and medium enterprises during COVID-19 pandemic. *Arab Journal of Basic and Applied Sciences, 28*(1), 187-194. doi:https://doi.org/10.1080/25765299.2020.18 30514
- Asad, M., & Qadeer, H. (2014). Components of working capital and profitability: A case of fuel and energy sector of Pakistan. *Pardigms A Journal of Commerce, Economics, and Social Sciences,* 8(1), 50-64. doi:10.24312/paradigms08010
- Asad, M., & Sharif, M. N. (2016). Entrepreneurial orientation market orientation and performance of SMEs moderating effect of network ties. *2nd International Conference on Business Management*. Jakarta.
- Asad, M., Ahmad, I., Haider, S. H., & Salman, R. (2018). A critical review of islamic and conventional banking in digital era: A case of Pakistan. *International Journal of Engineering & Technology*, 7(4.7), 57-59.
- Asad, M., Altaf, N., Israr, A., & Khan, G. u. (2020). Data analytics and SME performance: A bibliometric analysis. *2020 International*

Conference on Data Analytics for Business and Industry: Way Towards a Sustainable Economy (ICDABI) (pp. 1-7). Sakhir: IEEE. doi:10.1109/ICDABI51230.2020.9325661

- Asad, M., Asif, M. U., Allam, Z., & Sheikh, U. A. (2021). A mediated moderated analysis of psychological safety and employee empowerment between sustainable leadership and sustainable performance of SMEs. 2021 International Conference on Sustainable Islamic Business and Finance (pp. 33-38). Sakheer: IEEE. doi:10.1109/IEEECONF53626.2021.9686340
- Asad, M., Asif, M. U., Bakar, L. J., & Altaf, N. (2021). Entrepreneurial orientation, big data analytics, and SMEs performance under the effects of environmental turbulence. 2021 International Conference on Data Analytics for Business and Industry (ICDABI) (pp. 144-148). Zallaq: IEEE. doi:10.1109/ICDABI53623.2021.9655870
- Asad, M., Asif, M. U., Bakar, L. J., & Sheikh, U. A. Transformational (2021).leadership, sustainable human practices, resource sustainable innovation and performance of SMEs. 2021 International Conference on Decision Aid Sciences and Application (DASA) (pp. 797-802). Sakheer: IEEE. doi:10.1109/DASA53625.2021.9682400
- Asad, M., Asif, M. U., Khan, A. A., Allam, Z., & Satar, M. S. (2022). Synergetic effect of entrepreneurial orientation and big data analytics for competitive advantage and SMEs performance. 2022 International Conference on Decision Aid Sciences and Applications (DASA) (pp. 1192-1196). Chiangrai, Thailand: IEEE.

doi:10.1109/DASA54658.2022.9765158

- Asad, M., Chethiyar, S. D., & Ali, A. (2020). Total management, quality entrepreneurial orientation, and market orientation: Moderating effect of environment on performance of SMEs. Paradigms; A Research Journal of Commerce, Economics, and Social 102-108. Sciences. 14(1). doi:10.24312/193014016
- Asad, M., Haider, S. H., & Fatima, M. (2018). Corporate social responsibility, business ethics, and labor laws: A qualitative analysis

on SMEs in Sialkot. *Journal of Legal, Ethical and Regulatory Issues, 21*(3), 1-7.

- Asad, M., Haider, S. H., & Javaid, M. U. (2010). Entrepreneurs perception towards growth of SMEs in Pakistan. 3rd International Applied Business Research Conference. Islamabad: International Islamic University.
- Asad, M., Haider, S. H., Akhtar, M. B., & Javaid, M. U. (2011). Human resource practices and enterprise performance in small and medium enterprises of Pakistan. *First International Conference on Contemporary Issues of Business* (pp. 1-18). Lahore: COMSATS.
- Asad, M., Iftikhar, K., & Jafary, A. Y. (2019). Relationship between capital structure and financial performance of textile sector companies. *Kashmir Economic Review*, 28(1), 39-52.
- Asad, M., Kashif, M., Sheikh, U. A., Asif, M. U., George, S., & Khan, G. u. (2021). Synergetic effect of safety culture and safety climate on safety performance in SMEs: Does transformation leadership have a moderating role. *International Journal of Occupational Safety and Ergonomics*, 1-7. doi:10.1080/10803548.2021.1942657
- Asad, M., Muhammad, R., Rasheed, N., Chethiyar, S. D., & Ali, A. (2020). Unveiling antecedents of organizational politics: An exploratory study on science and technology universities of Pakistan. *International Journal of Advanced Science and Technology, 29*(6s), 2057-2066.
- Asad, M., Rizwan, A., Shah, M., & Munir, A. (2018). Impact of innovation practices on sustainable performance of SMEs. *Herald National Academy of Managerial Staff of Culture and Arts, 3*, 537-546.
- Asad, M., Shabbir, M. S., Salman, R., Haider, S. H., & Ahmad, I. (2018). Do entrepreneurial orientation and size of enterprise influence the performance of micro and small enterprises? A study on mediating role of innovation. *Management Science Letters*, 8(10), 1015-1026. doi:10.5267/j.msl.2018.7.008
- Asad, M., Sharif, M. N., & Alekam, J. M. (2016). Moderating role of entrepreneurial networking on the relationship between access to finance and performance of micro and small enterprises. *Paradigms A Research Journal of*

*Commerce, Economics, and Social Sciences, 10*(1), 1-13. doi: 10.24312/paradigms100101

- Asad, M., Sharif, M. N., & ALekam, J. M. (2016). Moderating role of entrepreneurial networking on the relationship netween entrepreneurial orientation and performance of MSEs in Punjab Pakistan. *Science International*, 28(2), 1551-1556.
- Asad, M., Sharif, M. N., & Hafeez, M. (2016). Moderating effect of network ties on the relationship between entrepreneurial orientation, market orientation, and performance of MSEs. *Paradigms: A Research Journal of Commerce, Economics, and Social Sciences,* 10(2), 69-76. doi:10.24312/paradigms100207
- Asad, M., Tabash, M. I., Sheikh, U. A., Al-Muhanadi, M. M., & Ahmad, Z. (2021). Goldoil-exchange rate volatility, Bombay stockexchange and global financial contagion 2008: Application of NARDL model with dynamic multipliers for evidences beyond symmetry. *Cogent Business & Management*, 7, 1-30.

doi:https://doi.org/10.1080/23311975.2020.18 49889

Asif, M. U., Asad, M., Bhutta, N. A., & Khan, S. N. (2021). Leadership behavior and sustainable leadership among higher education institutions of Pakistan. Sustainable Leadership and Academic Excellence International Conference (SLAE) (pp. 1-6). Manama, Bahrain: IEEE Xplore.

doi:10.1109/SLAE54202.2021.9788081

- Asif, M. U., Asad, M., Kashif, M., & Haq, A. u. (2021). Knowledge exploitation and for knowledge exploration sustainable 2021 performance of SMEs. Third International Sustainability and Resilience Conference: Climate Change (pp. 29-34). Sakheer: IEEE. doi:10.1109/IEEECONF53624.2021.9668135
- Bashir, A., & Asad, M. (2018). Moderating effect of leverage on the relationship between board size, board meetings and performance: A study on textile sector of Pakistan. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS), 39*(1), 19-29.

- Bilal, Z. O., & Sulaiman, M. A. (2021). Factors persuading customers to adopt islamic banks and windows of commercial banks services in Sultanate of Oman. *Review of International Geographical Education(RIGEO)*, 11(4), 651-660. doi:10.33403/rigeo. 800679
- Chethiyar, S. D., Asad, M., Kamaluddin, M. R., Ali, A., & Sulaiman, M. A. (2019). Impact of information and communication overload syndrome on the performance of students. *Journal of Human and Social Sciences*, 390-406.
- Chethiyar, S. D. M., Vedamanikam, M., Sameem, M. A. M., Asad, M., & Wazir, M. N. H. B. M. (2021). Orchestrating Money Mule Recruitment During Covid Pandemic: Explorative Study. *Ilkogretim Online*, 20(2), 1629-1641.
- Damer, N., Al-Znaimat, A. H., Asad, M., & Almansour, A. Z. (2021). Analysis of motivational factors that influence usage of Computer Assisted Audit Techniques (CAATs) auditors in Jordan. Academy of Strategic Management Journal, 20(Special Issue 2), 1-13.
- Fadhel, H. A., Aljalahma, A., Almuhanadi, M., Asad, M., & Sheikh, U. (2022). Management of higher education institutions in the GCC countries during the emergence of COVID-19: A review of opportunities, challenges, and a way forward. *The International Journal of Learning in Higher Education*, 29(1), 83-97. doi:https://doi.org/10.18848/2327-7955/CGP/v29i01/83-97
- Farrukh, W., & Asad, M. (2017). The determinants of capital structure: A study on cement sector of Pakistan. *International Journal of Management Sciences and Business Research*, 6(2), 16-26.
- Fatima, S. Z., & Asad, M. (2018). Disposal of hospital wastage in Pakistan: A qualitative research. Advances in Social Sciences Research Journal, 5(3), 37-42. doi:10.14738/assrj. 53.4197
- Haider, S. H., Asad, M., & Almansour, A. Z. (2015). Factors influencing growth of cottage industry in Punjab Pakistan: Cottge industry owners perspecive. *Paradigms: A Research Journal of Commerce, Economics, and Social Sciences, 9*(1), 78-87.

- Haider, S. H., Asad, M., & Almansour, A. Z. (2015). Factors influencing growth of cottage industry in Punjab, Pakistan: Cottage industry owners' perspective. *Paradigms: A Research Journal of Commerce, Economics, and Social Sciences, 9*(1), 78-87. doi:10.24312/paradigms090105
- Haider, S. H., Asad, M., & Aziz, A. (2015). A survey on the determinants of entrepreneurial training effectiveness among micro finance institutions of Malaysia. *Mediterranean Journal of Social Sciences*, 6(6 S4), 396-403. doi:10.5901/mjss.2015.v6n6s4p396
- Haider, S. H., Asad, M., & Fatima, M. (2017).
  Entrepreneurial orientation and business performance of manufacturing sector small and medium scale enterprises of Punjab Pakistan. *European Business and Management*, 3(2), 21-28. doi:10.11648/j.ebm.20170302.12
- Haider, S. H., Asad, M., & Fatima, M. (2017). Responsibility of global corporations towards human resource to attain competitive advantage: A review. *Journal of Research in Administrative Sciences*, 6(2), 9-12.
- Haider, S. H., Asad, M., Fatima, M., & Abidin, R. Z. (2017). Microfinance and performance of micro and small enterprises: Does training have an impact. *Journal of Entrepreneurship* and Business Innovation, 4(1), 1-13. doi:https://doi.org/10.5296/jebi.y4i1.10566
- Haider, S. H., Asad, M., Fatima, M., & Atiq, H. (2017). Mediating role of opportunity recognition between credit, savings and performance of micro and small enterprises in Pakistan. Journal of Advanced Research in Business and Management Studies, 7(2), 91-99.
- Haider, S. H., Fatima, M., Asad, M., & Ahmad, A.
  Z. (2016). A study on the issues of employment contracts and practices of employment contracts in UAE. *Paradigms: A Journal of Commerce, Economics, and Social Sciences, 10*(1), 58-64. doi: 10.24312/paradigms100105
- Hammami, S. M., Ahmed, F., Johny, J., & Sulaiman, M. A. (2021). Impact of knowledge capabilities on organisational performance in the private sector in Oman: An SEM approach using path analysis. *International Journal of*

*Knowledge Management, 17*(1), 15-18. doi:10.4018/IJKM.2021010102

- Haq, M. A., Asad, M., Natarajan, V., Sankar, J. P., & Asif, M. U. (2021). 2020 Microfinance and empowerment: A case study on benificiaries of a community development program. *Turkish Journal of Computer and Mathematics Education*, 12(9), 3282-3288. doi:https://doi.org/10.17762/turcomat.v12i9.54 79
- Hussain, S. M., Chethiyar, S. D. M., & Ibrahim, N. B. (2022). Impact of Emotional Exhaustion and Work Environment on Job Performance of Nurses: The Moderating Role of Rumination. *Pakistan Journal of Social Sciences*, 42(2), 457-466.
- Irfan, S. M., & Ijaz, A. (2011). Comparison of Services Quality Between private and Public Hospital : Empirical Evidence From Pakistan. *Quality and Managment Technology*, 1-22.
- Irfan, M., Ejaz, A., & Faroq, M. (2012). Imapct of service quality on patients satisfaction in public hospitals of Pakistan. *Middle east journal of Scientific Research*, 6(12), 870-877.
- Irfan, S., & Ijaz, A. (2011).
- Irfan, S., & Ijaz, A. (2011). Comparison of service quality between private and public Hospital. *Journal of quality and technology*, 8(1), 1-120.
- Israr, A., Asad, M., Altaf, N., & Victor, S. (2021). Training effectiveness and performance of micro small and medium sized enterprises. *Turkish Journal of Computer and Mathematics Education*, 12(9), 3289-3295. doi:https://doi.org/10.17762/turcomat.v12i9.54 80
- Kanwal, N, & Janjua, Y. (2014). Impact of service quality on patient satisfaction. *International journal for service quality research*, 8(3), 447-460.
- Kashif, M., Asif, M. U., Ali, A., Asad, M., Chethiyar, S. D., & Vedamanikam, M. (2020). Managing and implementing change successfully with respect to COVID-19: A way forward. *PEOPLE: International Journal of Social Sciences*, 6(2), 609-624. doi:org/10.20319/pijss.2020.62.609624
- Kazmi.N, & el, a. (2013). Impact of service quality on patient satisfaction. *Management science Letter*.

#### Journal of Mental Health and Social Rehabilitation

- Khalil, R., Asad, M., & Khan, S. N. (2018). Management motives behind the revaluation of fixed assets for sustainability of entrepreneurial companies. *International Journal of Entrepreneurship*, 22(Special), 1-9.
- Khan, A. A., & Asad, M. (2006). Role of micro finance in poverty alleviation in Pakistan. *National Research Conference*. Lahore: University of Soith Asia.
- Khan, A. A., Asad, M., Khan, G. u., Asif, M. U., & Aftab, U. (2021). Sequential mediation of innovativeness and competitive advantage between resources for business model innovation and SMEs performance. 2021 International Conference on Decision Aid Sciences and Application (DASA) (pp. 724-728). Sakheer: IEEE. doi:10.1109/DASA53625.2021.9682269
- Khan, A. A., Haider, S. H., & Asad, M. (2011). Socio Economic Impact of Microfinance: A Case Study of Punjab Pakistan. Lahore: University of Central Punjab.
- Khan, S. N., Asad, M., Fatima, A., Anjum, K., & Akhtar, K. (2020). Outsourcing internal audit services; A review. *International Journal of Management*, 11(8), 503-517. doi:International Journal of Management
- Khushi, M., din, S. M., & Sulaiman, M. A. (2020). Effects of profitability measures on free cash flow; Evidence from Pakistan Stock Exchange. International Journal of Scientific & Technology Research, 9(2), 3882-3889.
- Majali, T., Alkaraki, M., Asad, M., Aladwan, N., & Aledeinat, M. (2022). Green transformational leadership, green entrepreneurial orientation and performance of SMEs: The mediating role of green product innovation. *Journal of Open Innovation: Technology, Market, and Complexity,* 8(191), 1-14. doi:https://doi.org/10.3390/joitmc8040191
- Martins, A. L., Carvalho, C. J., & Ramos, T. (2015). Assessing Obstetrics Percived Quality at aPublic Hospital. *Procedia social and behavioral sciences*, 414-422.
- Muzammel.M, A., Areiqat, Y., & Tallakh, W. (2012). Impact of health service quality in patients satisfaction in the hospital of public and private sector. *International journal of marketing Studies, 4*(1).

- Ozlu, Z. K., & Uzun, O. (2015). Evaluation of Satisfaction with Nursing care of Patients Hospitalized in Surgical Clinics of Different Hospital. *International journal of caring science*, 19-24.
- Qalati, S. A., Ostic, D., Sulaiman, M. A., Gopang,
  A. A., & Khan, A. (2022). Social media and
  SMEs' performance in developing countries:
  Effects of technological-organizationalenvironmental factors on the adoption of social media. SAGE Open, 12(2), 1-13. doi:10.1177/21582440221094594
- Qamar, T., Chethiyar, S. D. M., & Equatora, M. A. (2022). Perceived stress, emotional intelligence and psychological wellbeing of mental health professionals puring covid-19 in Pakistan. *Journal of Advanced Guidance and Counseling*, 3(1), 14-31.
- Riphah, H. Z., Ali, S., Danish, M., & Sulaiman, M.
  A. (2022). Factors affecting consumers intentions to purchase dairy products in Pakistan: A cognitive affective-attitude approach. *Journal of International Food & Agribusiness Marketing*, 1-26. doi:10.1080/08974438.2022.2125919
- Sabir, I., Noor, N., Ahmed, W., Qaisar, W., Kamal, H., & Khurshed, N. (2014). Access the Service quality in thr hospital of Pakistan. *Journal of basic and applies scientific research*, 4(1).
- Sattar, M. s., Alarifi, G., & Asad, M. (2021). Gaining performance among tobacco sector small and medium enterprises through market orientation. *Tobacco Regulatory Science* (*TRS*), 7(6-1), 6879-6887.
- Shaker, R. Z., Asad, M., & Zulfiqar, N. (2018). Do predictive power of fibonacci retracements help the investor to predict future? A study of Pakistan Stock Exchange. *International Journal of Economics and Financial Research*, 4(6), 159-164.
- Sulaiman, M. A., & Ahmed, M. N. (2017). The essential elements of organized retail stores in influencing customers to stores. *International Journal of Applied Business and Economic Research*, 15(6), 1-6.
- Sulaiman, M. D. (2010). Microfinance challenges and opportunities in Pakistan. *European Journal of Social Sciences*, 14(1), 88-97.
- Tariq, A., Badir, Y. F., Tariq, W., & Bhutta, U. S. (2017). Drivers and consequences of green

product and process innovation: A systematic review, conceptual framework, and future outlook. *Technology in Society*, *51*, 8-23. doi:https://doi.org/10.1016/j.techsoc.2017.06.0 02

- Tariq, A., Badir, Y., & Chonglerttham, S. (2019). Green innovation and performance: moderation analyses from Thailand. *European Journal of Innovation Management*, 22(3), 446-467. doi:https://doi.org/10.1108/EJIM-07-2018-0148
- Tariq, A., Ehsan, S., Badir, Y. F., Memon, M. A., & Sumbal, M. S. (2022). Does green process innovation affect a firm's financial risk? The moderating role of slack resources and competitive intensity. *European Journal of Innovation Management*. doi:https://doi.org/10.1108/EJIM-05-2021-0265
- Ullah, Z., Otero, S. Á., Sulaiman, M. A., Sial, M. S., Ahmad, N., Scholz, M., & Omhand, K. (2021). Achieving organizational social sustainability through electronic performance appraisal systems: The moderating Influence of transformational leadership. *Sustainability*, 13(10), 1-14. doi:0.3390/su13105611
- Ullah, Z., Sulaiman, M. A., Ali, S. B., Ahmad, N., Scholz, M., & Han, H. (2021). The effect of work safety on organizational social sustainability Improvement in the healthcare sector: The case of a public sector hospital in Pakistan. *International Journal of Environmental Research and Public Health*, 18(12), 1-18. doi:10.3390/ijerph18126672
- Victor, S., ul Haq, M. A., Sankar, J. P., Akram, F., & Asad, M. (2021). Paradigm shift of promotional strategy from celebrity to social CEO. 2021 International Conference on Decision Aid Sciences and Applications (DASA) (pp. 1016-1023). Zallaq: IEEE. doi:10.1109/DASA53625.2021.9682256
- Zahra, K., Majeed, K., Mahmood, A., & Asad, M. (2012). Impact assessment of community participation in solid waste management projects in selected areas of Faisalabad city. *Journal of Urban Planning and Development*, 138(4), 319-327. doi:10.1061/(ASCE)UP.1943-5444.0000127
- Zerei, H., Kohan, D., & Puragha, B. (2015). Service quality on patients satisfaction in privates

hospitals Iran. *Global journal of health science*, 7(1).

Zuhaib , Z., Wenyuan, L., Sulaiman, M. A., Siddiqu, K. A., & Qalati, S. A. (2022). Social entrepreneurship orientation and enterprise fortune: An Intermediary role of social performance. *Frontiers in Psychology*, 12, 1-17. doi:10.3389/fpsyg.2021.755080

	Private Hospitals		Public Hospitals	
	Mean	S.D	Mean	S.D
Physical Environment and Infrastructure				
Hospital has modern equipment.	3.9333	0.79972	3.0984	1.42250
Hospital has clean rooms, beds and washrooms.	4.5500	0.79030	3.0000	1.19722
Hospital cleanliness is visually appealing.	4.4000	0.64309	3.7213	0.75567
Employees are dressed properly.	4.0000	0.97424	2.9016	1.09095
Empathy		•	•	•
Feedback is obtained from patients.	3.8333	1.06033	3.6939	0.87622
Doctors and staff understand your specific needs.	4.2000	0.65871	3.6393	1.00055
Employees have problem solving attitude	4.0333	0.63691	3.2623	0.81449
Adequate services are available round the clock.	3.6000	0.80675	3.4754	0.92388
Employees keep you at their best interest	3.8333	0.63221	3.1639	1.17161
Assurance			· · · · · · · · · · · · · · · · · · ·	
Hospital charges are accurate.	3.4000	1.09235	3.6557	1.09370
Free medicine provided to needy people at time.	3.8333	0.88618	3.1475	1.24948
Patients record is maintained accurately	4.1333	0.59565	3.4426	1.08819
Patients are explained their medical condition	3.8333	0.69298	2.7541	1.12035
thoroughly.				
Responsiveness				
Doctors and staff are responsive	3.6167	1.07501	3.6557	1.22318
Prompt and quick services are provided.	3.7000	0.86944	2.8525	1.16671
Employees are always willing to help you	4.0833	0.53016	3.2787	1.11252
Employees try to reduce waiting time in services	3.8667	0.59565	3.8197	1.00843
Needs of patients are attended quickly.	4.0833	0.53016	3.7869	0.93300
Patients Satisfaction				
I have never found any complain about this hospital	4.3167	0.65073	3.4098	1.16013
I am satisfied with the overall performance of hospital	4.3500	0.60576	3.7705	0.97286
I am satisfied with the employees' cooperation.	4.300	0.56148	3.4262	0.78441
Attendants are treated well in hospital.	4.2833	0.49030	3.8689	0.56200

Picture 1. Services quality of public hospital